## 2002 Climate Summary

January and February precipitation was generally below normal across much of Minnesota. January was dry and mild statewide. In February, exceptions to the dryness were found in some southeastern and central Minnesota counties. Late February snow depths were less than eight inches nearly everywhere in Minnesota. Large sections of northwestern and southern Minnesota reported less than two inches of snow cover.

March precipitation was generally near normal across much of Minnesota. After a three-month period lacking in significant snow events, March compensated for the shortfall by bringing three substantial snowstorms to Minnesota. In sharp contrast with a winter-long trend of unusually warm weather, March 2002 temperatures finished significantly below normal. Temperatures across the state were four to nine degrees lower than historical averages. In a unique juxtaposition, the March mean temperature was colder than any of the preceding winter months in many communities.

April precipitation was somewhat below normal in northern and western Minnesota and a little above normal in central, east central, and southeastern counties. May precipitation totals were generally below normal across Minnesota. In most locations, May precipitation fell short of the historical average by more than one half inch. May precipitation deficits were greater than one and a half inches in many northeastern, south central, and southeastern Minnesota communities.

June 2002 was one of the wettest months in Minnesota's post-settlement history. June 2002 precipitation totals exceeded 10 inches in numerous communities of northwestern, north central, central, and southeastern Minnesota. Monthly totals surpassing 12 inches were reported in Norman, Mahnomen, Roseau, Lake of the Woods, Koochiching, and Goodhue counties. The excessive rainfall led to devastating flooding in northwestern Minnesota communities such as Roseau, Ada, and Mahnomen.

July and August precipitation totals were also above average across much of Minnesota. With some exceptions, July 2002 was a wet month across much of the northern three quarters of Minnesota. Rainfall totals exceeded historical July normals by two or more inches in many locations. Precipitation totals surpassed the norm by four or more inches in sections of west central, central, and east central Minnesota. August 2002 monthly rainfall totals across much of Minnesota were well above historical norms. August rainfall totals of more than eight inches were reported at a number of locations scattered around the state. Rainfall in these areas was four or more inches above normal.

During the summer of 2002, Minnesota was an oasis of wetness, wedged between drought-ravaged states to the west and east. The June through August period was Minnesota's third wettest on record. The state-averaged summer (June-August) rainfall total for Minnesota was 16.35 inches. Growing season precipitation totals through the late summer were very high relative to historical values across northwest, central, and east central Minnesota. In these areas, precipitation totals exceeded historical averages by more than 50 percent for the season. By contrast, some sections of northeastern Minnesota reported rainfall deficits for the season.

The autumn of 2002 began with the continuance of the warmth of the summer in September, with precipitation slightly below normal statewide. October turned much cooler with some significant precipitation events during the first half of the month. The second half of October was dry, beginning a trend of dryness that lasted the rest of the year. In many communities, November 2002 was among the driest Novembers on record. December was dry and by the end of the year the southern two thirds of the state had virtually no snow cover.

Source: State Climatolology Office, DNR – Division of Waters

2002 Annual Precipitation

Departure from Normal

Prepared by:

State Climatology Office

DNR Waters

State Climatology Office

DNR Waters

values are in inches

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